

**Notice of Allowability**

Application No.

10/761,260

Examiner

Terry L. Englund

Applicant(s)

KANG, TZUNG-HUNG

Art Unit

2816

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amdt/Dwgs (May 24, 2005).
2. ☒ The allowed claim(s) is/are 1-16, and 18-22 (now renumbered as 1-21, respectively for printing purposes).
3. ☒ The drawings filed on 24 May 2005 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's ~~Amendment~~ Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment/Drawings***

The amendment and drawings submitted on May 24, 2005 have been reviewed and considered with the following results:

The drawing's replacement sheets overcome all the drawing objections described in the previous Office Action. Therefore, those objections have now been withdrawn.

The amended paragraph overcame its objection, which has been withdrawn.

The cancellation of claim 17 rendered its objection, and rejection, moot.

Amended claim 5 overcame the objections to claims 5-8, and those objections have been withdrawn.

Although the amended changes (deletions) in claim 16's preamble are not shown, one of ordinary skill in the art would realize the claim's amended preamble has removed the references to the "power-on reset circuit", oscillator", "frequency detector", and "comparator" cited in the original claim. Therefore, the (understood) amended preamble, along with the amended steps within the claim, overcame the rejections of claim 16 and 18 under 35 U.S.C. 112 as described in the previous Office Action, and those rejections have been withdrawn.

Amended claims 10 and 15 overcame their respective rejection, which have been withdrawn.

By clearly indicating the oscillation frequency of the oscillation signal increases as the power source voltage increases, as now recited within claim 16, its rejection under 35 U.S.C. 102(b), with respect to Ikoma et al., has been withdrawn. For example, that reference's Figs. 6A and 6D show the frequency decreasing with an increase in power source Vdd.

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Therefore, there is no known objection or rejection remaining within the present application.

***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

None of the prior art references reviewed and considered shows/discloses a power-on reset circuit and/or method as recited within independent claims 1, and 16, and also newly added independent claim 20. More specifically, none of the references clearly shows/discloses: 1) the relationships between the oscillator and frequency detector as recited within claim 1, upon which claims 2-15 depend; or 2) the outputting of a first output voltage according to the oscillation frequency, which increases (or changes) as the power source voltage increases (or changes), as recited within claims 16 (upon which claims 18-19 depend) and 20 (upon which claims 21-22 depend). Since there is no strong motivation to modify or combine any prior art reference to ensure all the recited limitations within any of the independent claims are met, the claims are deemed patentably distinct over the prior art of record.

Claims 1-16, and 18-22 are allowed, and have been renumbered as claims 1-21, respectively for printing purposes. The renumbering takes into account the cancellation of claim 17.

***Prior Art***

Although one of ordinary skill in the art knows that the frequency of an oscillating circuit can change with the power supply voltage, there is no strong motivation to use such a relationship within a power-on reset circuit/method as recited within the claims. Using the reference of Ikoma et al. (cited in the previous Office Action's prior art rejection) as an example,

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the reference discloses that voltage detection circuits can be used to generate reset signals (e.g. see column 1, lines 12-17), and it is understood that oscillator 40 (of Fig. 5) provides signal CK at a frequency that is inversely proportional to power source voltage Vdd (e.g. see Figs. 6A and 6C). However, first output voltage Vref is held constant, and it is also disclosed as being independent on Vdd (e.g. see column 2, lines 26-28). Therefore, the Ikoma et al. reference does not clearly show/disclose the first output voltage being actually output according to the frequency of the oscillation signal. The reference discloses the change in frequency helps to reduce the amount of current the overall circuit utilizes (e.g. see column 4, lines 21-41), and therefore it is understood that the frequency changes are not actually used to determine when the output signal is generated.

Any comments considered necessary by the applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication, or previous communications, from the examiner should be directed to Terry L. Englund whose telephone number is (571) 272-1743. The examiner can normally be reached Monday-Friday from 7 AM to 3 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached on (571) 272-1740.

The new central official fax number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1562.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*TLE*

Terry L. Englund

2 June 2005

*Kenneth B. Wells*  
Kenneth B. Wells  
Primary Examiner

Approved  
6.2.05  
TLE

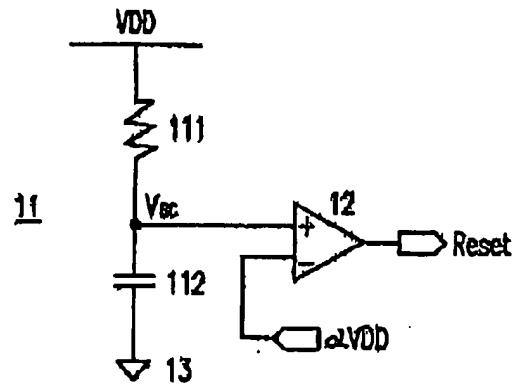


FIG. 1 (PRIOR ART)

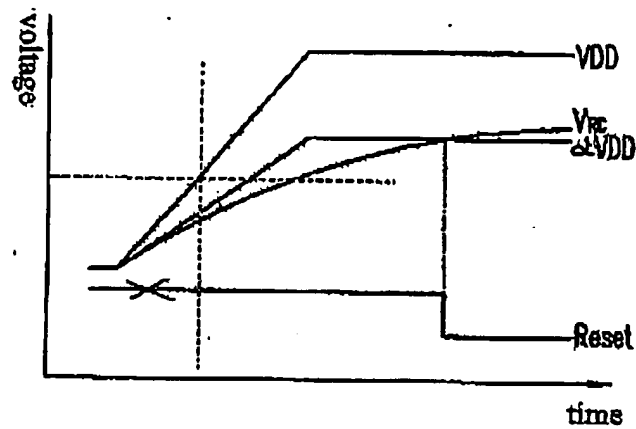


FIG. 2 (PRIOR ART)

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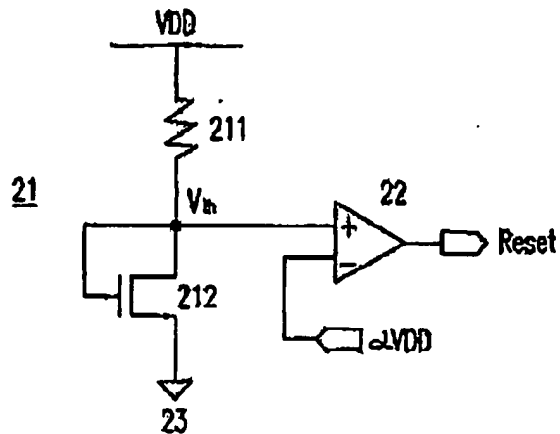


FIG. 3 (PRIOR ART)

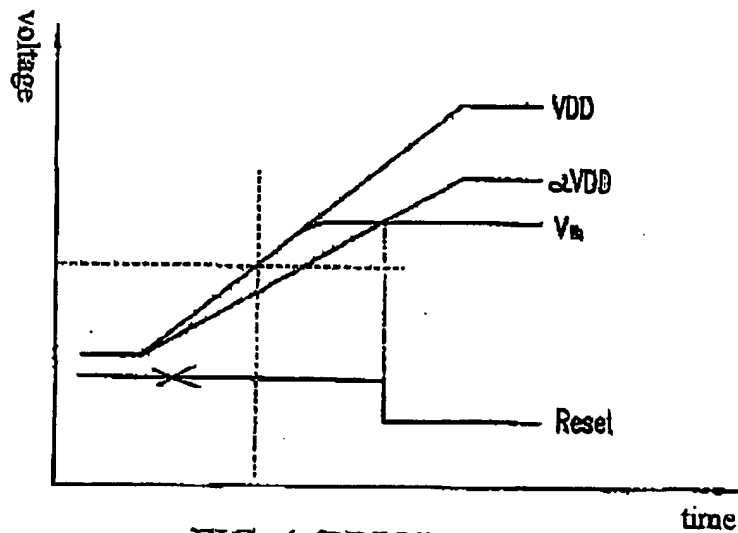


FIG. 4 (PRIOR ART)

"REPLACEMENT SHEET"

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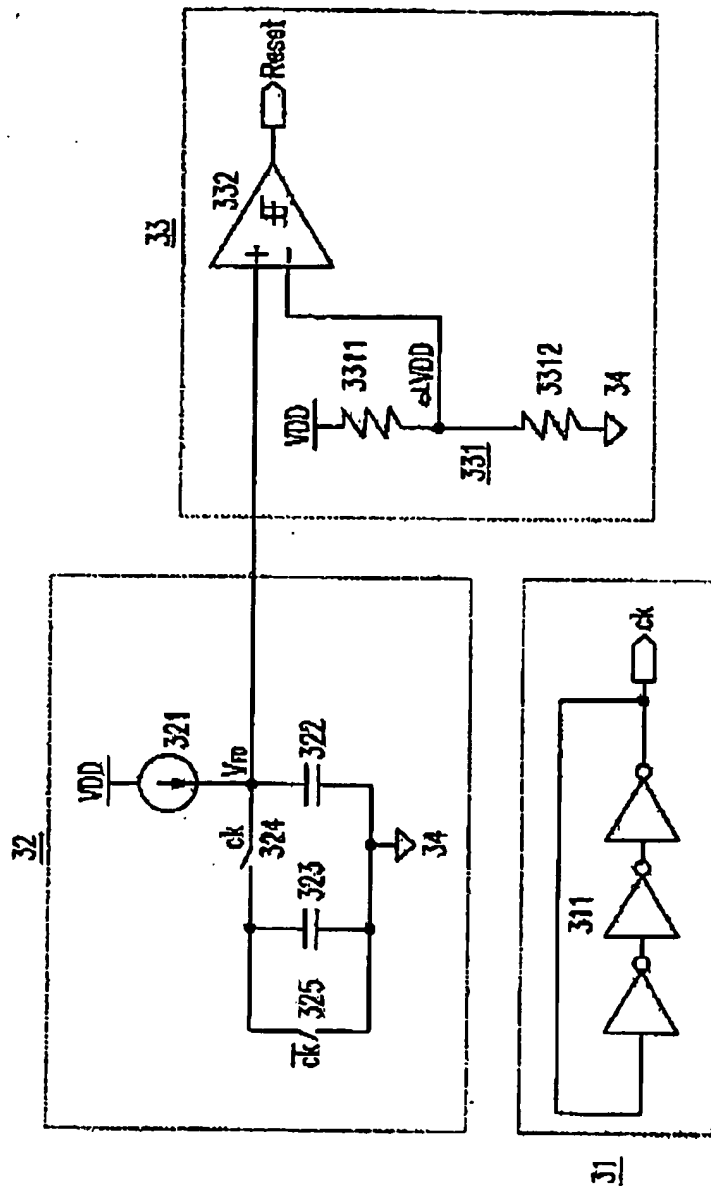


FIG. 5



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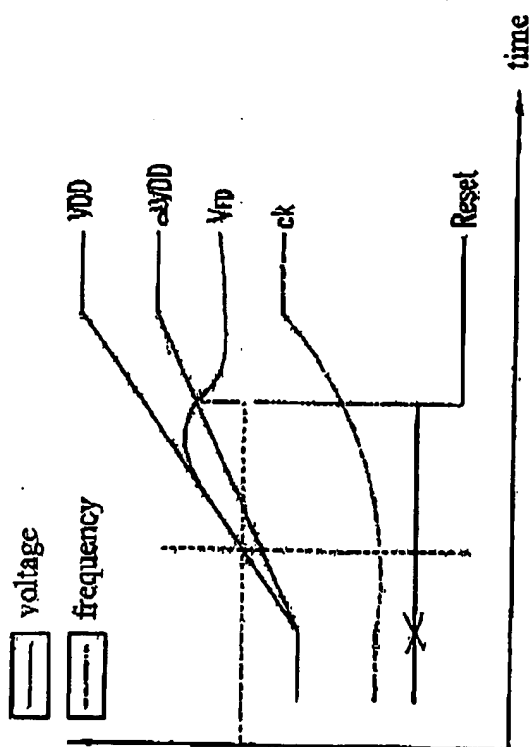


FIG. 6